

Sunday, December 23, 2007

/nuc book/2nd strike D-L

In the late Fifties, the clichés among arms controllers and disarmers were “minimum deterrence” and “overkill.” From the time that the Soviets exploded their first H-bomb—often, still, dated as 1953 (which was really a test of a “boosted” fission bomb) or, really, as 1954—it was taken for granted by physicists and others outside the classified weapons community that a successful first strike was infeasible. The only attainable goal of possessing strategic nuclear weapons was to deter their use by threatening unacceptable retaliation. This was a threat easy to make maximally credible, since even one, or several, delivered thermonuclear weapons would be so destructive as to make an attack totally irrational that brought down even a few H-bombs on the attacker in response.

A corollary was that the thousands of warheads possessed by the US were almost entirely redundant. That was true even of a stockpile in hundreds, which would assure almost the total annihilation of the population of the Soviet Union. The hundreds of warheads beyond that would merely “make the rubble bounce,” kill the Soviet population several times over: a pointless waste, whose existence merely testified to the inertia of the production process and of an age-old but obsolete assumption that national strength was an increasing function of destructive power and that you could not have too much of it.

At the RAND Corporation, however, there were two rationales for large strategic forces: both of them within the publicly-declared rationales that nuclear weapons were for deterrence and retaliation. One was Albert Wohlstetter’s emphasis on “second-strike forces,” that part of the arsenal—a small fraction of the peacetime forces—that could be relied on to survive a cleverly-designed and executed Soviet first strike. This was the focus of most RAND analysis from the mid-Fifties through the early Sixties.

(It was entirely illusory, reflecting a strongly-held belief with no foundation in Soviet reality that the Soviets were working on a crash basis to acquire the capability for a disarming first strike against the US. It was exactly as unfounded and misleading as the earlier belief in a German Manhattan Project after 1942, or the later beliefs in an Iraqi WMD program after 1991-94 or an Iranian nuclear weapons program after 2003. Or the transient belief in Congress that the North Vietnamese had attacked American destroyers twice in August 1964).

[How to tell this? Probably by “showing rather than telling.” By describing vividly the anxieties into which I was plunged at RAND in 1958 and 1959. (Though, to motivate the reader to stay with this account, it could be good to do it as a flashback, starting with the discovery that there was no missile gap—or even earlier, with the 325 million estimate—and the reality that there was no crash SU ICBM program in 1961. Irony: my own Gilpatric speech, followed by the/my Ann Arbor (Athens) speech, along with the Turkish IRBMs, motivated that Cuban Missile Crisis: which in turn led to the Brezhnev ICBM buildup, when the JFK-K détente and test ban treaty were aborted with JFK’s death). But my own speeches reflected the inertial effect on my thinking of Cold War

assumptions: how to exploit the end of the missile gap in terms of Berlin, rather than in terms of the possibility of new arms control agreements, ending and reversing the arms race (see Garthoff).

Andy Marshall and Second-strike damage-limiting

In the summer of 1958 and in 1959, my colleagues and I lived with the fear that the Soviets had already or would soon have an ability to disarm the US retaliatory forces with a surprise first strike, but that the US would have no such capability with respect to the Soviets. This was because we believed that the location of the emerging Soviet missile force, and even the location at any given time of the Soviet bomber force was unknown to the Strategic Air Command, making their strategic forces effectively invulnerable to attack, in contrast to our open society. We shared this assumption with outside critics of our nuclear policies (who did not, on the other hand, share our very esoteric belief that our own retaliatory forces were very vulnerable to the Soviets, and thus that the relatively small fraction of our forces that might survive a well-designed Soviet first strike did not represent “overkill,” but might actually be insufficient to deter such an attack).

Outsiders believed in a symmetry of the side being attacked to devastate the attacker in reply. Thus a nuclear attack was irrational under any circumstances, for either. Deterrence was assured, for rational decision-makers; and this was attained by forces much smaller than those possessed by either side. RAND insiders, on the other hand, believed in an asymmetry between the US and Soviet forces, favoring the Soviets: given their closed society and secrecy, they had a potential for an effective first-strike that the US did not have; or to put it another way, they had an assured second-strike capability and the US did not. We saw our task at RAND as achieving, without Soviet-style secrecy, a reliable second-strike capability.

But Andy Marshall introduced me sometime in 1960 to the notion of second-strike damage-limiting capability. At first hearing, this sounded like an oxymoron, self-contradictory, within the framework of assumptions widely shared. How could the side being attacked, striking second, limit in any way the destructive power being launched against it? After all, what would be the use of attacking Soviet missile silos, when the missiles had already been launched? Why destroy empty holes?

But Andy pointed out that space launches were almost invariably delayed by various glitches and unexpected problems. To a large extent, this represented the desire for maximum safety where astronauts were involved; but it was also true for unmanned flights. But Andy revealed to me that the same problems arose when there were tests of operational missile launches. These were conducted at the coastal test sites. (In fact, I believe I recall that as of the early Sixties, there had never been an actual test launch from an operational silo, into the Pacific Test Range: let alone, of course, a launch across the Pole. Nor had there been—perhaps there has never been—a multiple launch from operational silos.) They, too, were invariably delayed from the original launch time, for a variety of reasons.

Andy said: If the Soviets ever gave the order for a simultaneous launch of many missiles (or a timed, phased launch of various volleys, precisely timed from various locations to allow a simultaneous breaching of US radars, or simultaneous arrival on target, to

minimize warning to the US) “a few” missiles would launch exactly on time, or near it. Most would simply still be sitting on their launch pads, or in their silos or submarines, for minutes to hours after the scheduled time. If the US had the ability to move in fast, e.g. with air-launched missiles from strike aircraft on air patrol, they would find a large fraction of pads and silos that were not empty. Destroying these would greatly reduce the destruction from the Soviet attack. Moreover, it would prevent the Soviets from reloading the launchers with reserve missiles.

--Attack command and control: decapitate; delay a Soviet response by hours to days, allowing lots of time for attack.

(In a US first strike: decapitation would prevent the Soviets from reallocating surviving missiles to targets left uncovered by the destruction of some or most of their missiles. Two or more surviving warheads would still be targeted on the same target, or on secondary targets, with primary targets left uncovered.)

--In reality, Andy revealed, Soviet air forces were non-alert, and had not practiced relocation to forward bases or dispersal; thus, they were very vulnerable. (Unlike SAC). (He did not emphasize that this meant a US first strike was feasible. What he drew was that even if they launched a first-strike on a false alarm, it would be possible to reduce their destructive capability by attacking planes that would still be on the ground.

--Eventually, he revealed to me: 1) the meaning of T and K clearances (I first heard from: Cragg?) 2) the existence of the U-2 (or did that just come out with Powers?) (was it in 1962, or 1963, that I was using T and K clearances, at RAND? Note how few had them); 3) the non-existence of the missile gap (before he told us the basis for that) (He referred to Pete ...; we told JFK, but he ignored it)

And I learned: 4) the new SNIE, September, 1961; 5) the Discover series; 6) thus, the facts that the Soviet force was both small and non-alert; 7) we were facing an entirely different “enemy,” both in intent and in capability, than we imagined and feared; in fact, it was not even an “enemy” in the same sense (see Iraq, Iran! Germany with respect to the US, or the ability to win WWII, after 1941-42 (though it was reasonable to fear nucs through mid-1944);

--Thus, into 1964, there was a considerable capability for a US first strike, with little or no damage to the US (see JCS to JFK in 1961; LeMay in 1962) though much greater damage to Europe than we considered at all;

first-strike damage-limiting made sense in that period; after 1964-1965, much less, or not at all: especially, compared to the advantages of limiting offensive capability on both sides, and avoiding war altogether. (That was true earlier, as well, even though a first-strike was not totally devastating to the US as a whole: it might “only” have annihilated New York, Washington or LA! Imagine super-Katrinass for one or all of those! And compare this to the actual threat to us posed by the Soviets! I.e. to the supposed

advantage of eliminating them as a rival or threat (like, now, eliminating Iran by an air attack).

Perhaps what kept the notion of FS alive was"

- a) the possibility of decapitation
- b) the importance of the FU threat in Europe, threat of escalation: to maintaining our role in the NATO alliance, not so much to deterring the Soviets;
- c) maintaining a threat of FS (a belief that we might believe in FS D-L) to maintain a FU threat outside Europe: VN; Iran; Yugoslavia? Japan; South Korea;
- d) the MIC: aerospace industry, electronics; the role of the USAF; the political economy of defense spending, for campaign contributions to presidents and Congress, jobs.

(1964 was 42 years ago).

Note the refusal to negotiate disarmament (as in 1961-62, or earlier 1954 Bulganin) in 1989-91.

And the maintenance of the FU threat in 1992-9... to "prevent or deter WMDs"—which meant, I suspect, Iraqi CW/BW and nucs (which, instead, inspection stopped in 1991-94!); or against Iranian underground sites (nuc program stopping in 2003; was it ever underground? Where and what was it? That would be good for Iranians to answer! Or: would that stop Bush from attacking, or just give him targets? If Bush doesn't attack, Iran should certainly answer this no later than 2009!)

To return: Andy revealed, sequentially: We do know where their planes and missiles are; (eventually: how we knew); they are non-alert; they are few.

Thus, "if war does occur" there is an answer to his question: "What should we do with our forces?" We should use them, quickly, to attack the planes and missiles still on the ground, even if the Soviets have already launched some. And this will markedly reduce his destructive capability, since his forces are small altogether (it will reduce a small attack force even more).

(Meanwhile, HK was pushing CD shelters. AJW was pushing bomber shelters (unnecessary), and missile silos (good, but misdirected: unnecessary); and PAL (good); and survivable C3; while SAC was using his analyses to push air alert (first-strike, and accident-prone); WWK pushing recon-strike, B-70, as answer to Polaris; navy preparing accurate Polaris and Poseidon; I pushing reserve forces, PAL; Hoag and MHH, NFU

Meanwhile, what the USAF/SAC/JCS had been pushing all along. (Helped by Khrushchev's bluffs!)

What we feared, at RAND.

What the reality was: in the SU; in USAF; in terms of plans, intent. In the White House, Establishment, MIC.

What the real dangers were, in the actually-existing systems.

What the revealed values were: ferocity, ruthlessness, recklessness, greed, power-drive...

What might have happened in the Cuban Missile Crisis.

What might have happened in Vietnam: JCS approach; Khe Sanh/1968; Nixon.

What the possibilities were for a reversal: Szilard/Rabinowittz; Bulganin/Khrushchev; Lilienthal/Oppenheimer/Conant/Bethe/Bundy H-bomb; JFK 1961; JFK 1962-63; Gilpatric Committee; desires of NNWS in 1968 and beyond; Gorbachev (Reagan); 1990...

Real US attitudes toward proliferation. (Eisenhower and Atoms for Peace; Israel, JFK and LBJ and Nixon; Rusk: India, Japan, Germany; NLF. LBJ/RFK/Gilpatric. Pakistan (SU testing; Afghanistan; Al Qaeda). Bush and North Korea/Iraq. Rejection of MP-II, 1995, 2000. Bush 2002, 2005. Iraq, Iran, NK.... Probable emergence of true "delicate balances."

Possibilities for cooperation given a nuclear terrorist attack, police states in the US and elsewhere, testing and global proliferation. Global rivalries over water and oil, refugee flows from environmental disasters and famines.